

SCIENCE · GRADE 6

Photosynthesis

How plants make their food

Key vocabulary

1

Chlorophyll

A green pigment in leaves that captures sunlight energy.

Example: Why most leaves look green.

2

Carbon dioxide

A gas plants take IN through tiny holes in their leaves (stomata).

Example: We breathe carbon dioxide OUT — plants use it.

3

Glucose

A type of sugar plants make for food.

Example: Stored as starch in roots, fruits, and seeds.

4

Stomata

Tiny holes on the underside of leaves that let gases in and out.

Example: Plants close them when very hot to save water.

The simple equation

Carbon dioxide + Water + Light energy → Glucose + Oxygen. The plant takes in CO₂ from the air and water from its roots; using sunlight captured by chlorophyll, it makes glucose to live on and releases oxygen as a by-product. Almost all the oxygen we breathe started inside a plant.

Apply



1. Why are most leaves green?
2. Where does the carbon dioxide come from for a plant on a windowsill?
3. What two things does photosynthesis produce?
4. Why does photosynthesis matter for animals (including humans)?

